

ACRO SPORT Newsletter



NO. 67

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Edited by: Chris Kinnaman

FALL 1999



And now...a two place Pixie!

May 6, 2000
Dear Paul,

Well, after 10 years of education and recreation, the Pober Pixie II is finished. While it took a little longer than I anticipated, it was all well worth it. The aircraft is ready for FAA final inspection. EAA technical counselor Owen Bruce (Chapter 168) performed three inspections during construction, the final at the airport after assembly. Here are some of the specifics:

Engine: Lycoming O-235-C1A (108 hp)
Wingspan: 33'9"
Wing Area: 150 sq. ft.
Empty weight: 830 lbs.
Gross Weight: 1375 lbs.
Initial Test Weight: 1002 lbs.
Wing Loading: 9.2 lbs./sq. ft.
Power Loading: 12.75 lbs./hp.
Fuel Capacity: 23 Gallons
Electrical System: Battery/Starter only (no generator)

Max Forward CG: 25.6 MAC
Max Aft CG: 32.7 MAC
Initial Test CG: 27% MAC
Estimated Build Time: 3000 Hours
Estimated Final Cost: \$16000

I used the PolyFiber (Stits) covering system, and it was a pure joy to work with. Polytone was used on all fabric surfaces, and Aerothane was used on the hard surfaces (aluminum and fiberglass). The seats are leather covered, along with leather cockpit coaming and visor. The front seat occupant has a full set of controls, exclusive of engine start and brakes.

It's been awhile since we exchanged letters, I hope things are going well for you and your family I'm sure you recall my son Stephen. He was just 15 years old when we first met in Denton. He is now almost 26, a military academy graduate (USMMA) and active Navy as NFO on the Grumman E2 Hawkeye. He is based at Norfolk, served a 6-month tour on the USS Enterprise during the Iran and Bosnia crisis, and will deploy on

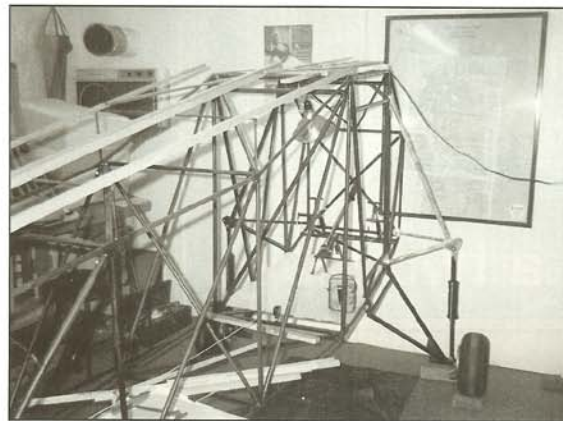
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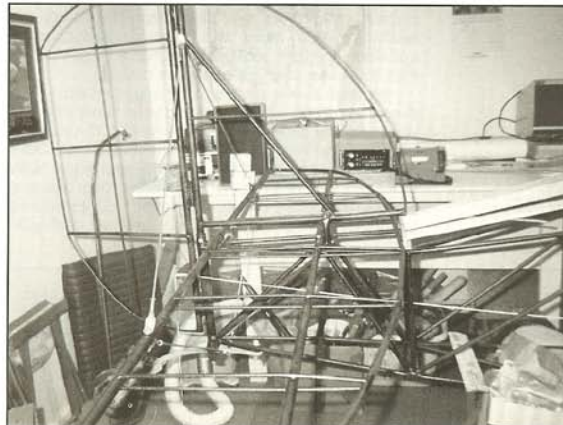
the USS Truman in August. We had hoped to meet at Oshkosh, he with an E2, and me with the Pixie II. As it stands, I hope to fly the Pixie II assuming I can get the test hours flown off in time.

It is with a great sense of pride that I can finally respond in the affirmative when asked if I have my own airplane Paul, and an even greater sense of pride when the subject of building and the EAA mission is discussed. the Pixie II has a notable heritage, and I'm sure you will agree that it is a very special "one of a kind" airplane. Hope to see you this summer. Thanks for your continuing friendship.

Sincerely,
Michael B. Hoyer
7 Pintail Point
Heath TX 75032



Construction of this cabin version of the Corben Baby Ace is well along toward completion. Appears to be excellent workmanship and it won't be long before another homebuilt takes wing.



Letters

7/16/99

Paul Poberezny:

I was really glad to get your latest letter, because it reminded me again to send my dues check back to you.

I usually plan the day for working on my project, but invariably something will come up unexpectedly, to change my plans.

I am mailing a check again for you to use for whatever. Now I need to ask a favor of you. Your last magazine had some real good pictures of the original Baby Ace, which were not in the original drawings.

The picture I am referring to shows the horizontal stabilizer with four brace wires on each side. Was this a late modification or an idea by an individual owner?

Would like your comments please.

Thought the new organization EAA, was very timely, I heard about it from Ron Scott who really inspired my start-up of a scratch-built project.

Thanks again for 46 years of airplane fun.

George Krautner

P.S. Several pictures of current work, wings are done but not yet covered.
8240 W. Beloit Road
West Allis, WI 53219

Editorial

Paul H. Poberezny

When I look back at the forty-seven years of EAA's existence. It is hard to believe the progress, and the great number of people who have been drawn to the homebuilt aircraft movement. And for me personally, the many thousands of people I have had the pleasure of meeting.

During the period right after WWII, some enthusiasm for designing and building airplanes was apparent, and much of it was the result of a small effort of dream designers and builders in various states in the mid and late thirties.

But after WWII it was the homebuilts of the racing era. The Goodyear racers caught the eyes of many yet to be homebuilders. I remember going to the Cleveland Air Races 1948-1949, and watching those 85 hp airplanes turn the pylons at speeds of 160-170 mph. True, there were the war surplus machines, the P-51, P-39, P-63, Corsairs, and others. But it was the homebuilts that interested me. Sleek and fast for its time. I went home and drew up sketches, plans of what I would like to do. But after the modified P-51 flown by Bill Odom crashed into a home during the 1949 Thompson Trophy Race. This accident brought an end to racing at Cleveland.

But racing enthusiasm did not die, as younger people, years later, caught the enthusiasm of old. Having been involved in the Reno Air Races for over thirty years. I am truly pleased to see the progress in design, workmanship, and speed attained by this same Formula One aircraft class.

The freedom we enjoy today to work with hand and mind permits us to be creative in our effort to design and build our own aircraft. For me it was an enjoyable and learning experience to be involved in the homebuilt movement, to work the then CAA/FAA in Washington, and with the thousands plus of aviation enthusiasts.

At the Oshkosh annual convention, Sun 'N Fun, and other EAA chapter events, where one can observe the quality of workmanship, design and innovation in the homebuilt movement by men and women gives me a great feeling.

Sometime one gets so close to an effort that you can miss something. It came to me that many have looked at the Acro Sport as being only the design of two airplanes, the single and two place biplanes. And little has been noticed of the two place Pober Jr. Ace, a side by side open cockpit airplane. The prototype being powered by a 90 hp Continental engine. The aircraft has some 150 hours of flying time, and nearing completion in my shop is another powered by a 118 hp Lycoming O-235 engine, full electrical, and even a radio.

This issue of the newsletter you will be seeing a beautiful Pixie, modified to a two place aircraft by Mr. Hoyer. See what freedom to be creative can accomplish.

Though when we designed the aircraft using the Heath Parasol LN-B as the basis for its design, we found that the 32-38 hp VW was not sufficient power, and that at least 65 hp would be needed for good performance.

The Pober Super Ace was based on the Corben Super Ace what was powered by a converted Model A Ford engine. It too was a bit underpowered and tail heavy. With the prototype, which is powered by a Continental C-85, we found it too needed a longer engine mount, especially with a 200 lb. pilot.

Innovations and improvements to any design aircraft will be made by a builder. Imagination and the freedom we enjoy results in making progress.

Forums at Airventure 2000

Forum times for Acro Sport designs at Airventure 2000 will be as follows: Pober Pixie, Junior Ace, Super Ace, Nesmith Cougar: 10:00 AM - 11:15 AM Friday, July 28, 2000. John Leitis, Pober Pixie builder and pilot, will be the moderator for this discussion. John has over 1000 hours on his Pixie and once again will present his valuable insights. The forum will be held indoors this year, in Forum Building #11. Acro Sport and Acro II: 10:00 AM - 11:15 AM Saturday, July 29, 2000. Don Baker will lead the discussion, joined by a panel of experts. Don flies aerobatic performances in his Acro II and has written many articles describing how he approaches each particular maneuver. This forum will also be held indoors in Forum Building 11, quite a difference from last year's open-air discussion.



The prototype single place Acro Sport in the shop at EAA's former headquarters at Hales Corners, Wis.

Did You Notice?

Knowing that all homebuilders read Sport Aviation cover to cover every month, this may not be news to you, but the article reporting on the 1999 MERFI Fly-In appearing in the March 2000 issue of EAA's Sport Aviation noted that Don Baker, long-time Acro Sport forum moderator, flew the opening performance of the airshow portion of the event in his Acro II — and the photographs accompanying the article were credited to Ken "Dusty" Patsch. Ken's Acro II project has been featured in this newsletter in the recent past and is well along toward completion.

Congratulations, Don and Ken! Your efforts are appreciated.

B.J. Elias' Acro II



Lining up on final – directly into the glaring rays of an evening setting sun.

B.J. Elias writes:

I picked up N46BJ as a project about three years ago. Plans serial # is 526. I spent a good bit of a year and a half reworking parts I considered to be inferior.

The engine, a Continental IO-360C is rated at 210 HP and is bored .015 over, now a little better than 210 HP. I get right at 135 MPH cruise at about 2300 - 2350 RPM. A sensenich wood prop. 76/64 seems to work well. I usually rotate in about 300 to 400 ft. of ground roll. The engine has been modified for inverted oil. I left the actual engine building to a friend of mine, Carlos Gahn, from north Georgia.

The lower wing is pushed back about 1/2" and it seems to work well. It gives me a little more forward C. G. without adding weight, plus it has separated the flying and landing wires to where they do not intersect each other. It has given me a little better approach with a passenger up front.

I'm in the process now of building a bulletproof

engine mount to handle the negative G's and extreme side loading. A smoke system is also a must in any biplane!

The airplane rolls extremely well. I found mine to have just a little slower roll rate than an S2B Pitts!

Paint took a little while and got to be tedious with the checkerboard. Typical Pitts scheme on the fuselage and wheel pants.

I started off with shock cords on the shock struts but with my exhaust stacks at about 12" away they tended to wear very quickly exposed to the heat. I now have the spring shock struts. No more worries about collapsing a gear leg. I'm also modifying the front and rear seat, with a home-made, partially slanted back like a lot of aerobatic airplanes. Kevlar seems to be the way to go for the strength needed in the seat area.

Great flying little Bipe!

B.J. Elias, 10967 Morning Dove Dr., Hampton GA 30228



B. J., – you didn't tell us who the pretty lady is! Here's hoping you both are sharing many hours of enjoyment in the ACRO II.



All components completed and painted – ready for final assembly.



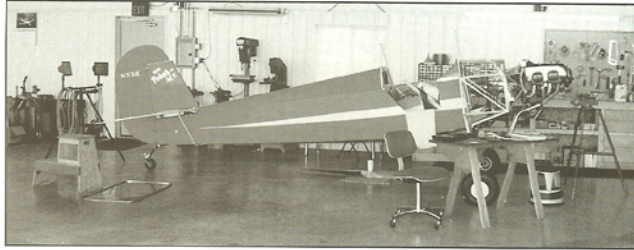
Enjoying a low level flight over the beautiful Georgia countryside.



Contemplating Carlos' handiwork, including the installation of the aircraft's Continental IO 360 C.



Paul Poberezny at Pioneer Airport with another aviation enthusiast. The guy in the Travel Air? That's Alan Jackson, country music star, obviously enjoying himself.



Paul's latest dual control Junior Ace in his hangar at Oshkosh. Powered with a O-time Lycoming O-235, 118 hp engine with metal prop. Has full electric, starter, alternator, radio, two wing tanks and is covered with Stits process.

Year 2000 Awards Dinner

This Year's awards dinner and get-together for Acro Sport, Acro II, Pober Junior Ace, Pober Super Ace, Pober Pixie, and Nesmith Cougar enthusiasts will be held at Robbins restaurant on Saturday evening, July 29, cocktails at 6:30 PM, dinner to follow at approximately 7:30 PM. Robbins is in Oshkosh (of course) on Hwy 21 near Hwy 41. Please RSVP to Acro Sport or sign up in the Acro Sport/ Poly Fiber tent at Oshkosh - oops! - Air Venture 2000.



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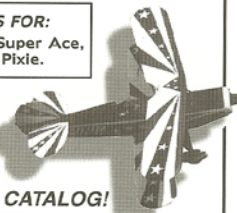
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Acro Sport, Acro Sport II, Pober Super Ace,
Pober Junior Ace, and Pober Pixie.



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National Biplane Association Fly-In

The National Biplane Association Fly-In will be held June 2-3, 2000, at Phillips Field, Bartlesville, Oklahoma. This is a relaxing get-together geared, obviously, toward biplane enthusiasts. Among the various Stearman and Waco classics one can find more modern examples of biplanes such as Pitts Specials, Macho Stinkers, Skybolts, Stardusters, and of course Acro Sports. The forum on the Acro Sport II will be presented Saturday, June 3, at 1:00 PM. Last year Steve Manweiler did an outstanding job detailing the points of interest in building and flying "Lonesome Linda", his multiple-award winning Acro II. Don't miss this year's event!

WANTED: Pober Super Ace abandoned project, materials, or unused kits

Alan Arrow
3102 Douglas Street
St. Joseph MO 64506
(816) 233-9394

Norman Girard's C-GGDJ

Norman Girard is the proud owner of this very pretty Acro Sport. This particular airplane appeared in the March 1976 issue of Sport Aviation. It was built by Paul Brooks of London, Ontario, Canada. Norman would like to get in touch with Paul Brooks. If you're out there, Paul, or if anyone can help make this connection, please contact: Norman Girard, 510 Principale, St. Sophie of Halifax, Quebec Canada, G0P 1L0, Telephone: 819-362-6427, email: Keith@ivic.9c.ca



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Have you seen this decal? It was spotted on a beautiful blue Junior Ace that was parked in the homebuilders section at a recent AirVenture gathering at Oshkosh.

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